



ONYX

Electrostatic Discharge ESD Simulator



■ **The ONYX** is a state of the art electrostatic discharge simulator available in 16kV or 30kV versions. It is the most ergonomic 30kV ESD gun **without an additional base control unit** that can be battery or mains operated. The easy to use touch screen, ergonomic design, modular RC units, multilingual interface, remote control software, built-in LED light and temperature & humidity display allows for trouble-free use of the ONYX in all types of test sites.

■ The **smart key** button, integrated into the trigger button has various functions that can be defined by the user including polarity switching, LED light, counter reset, voltage stepping up/down and others.

■ The ONYX also features a unique **self test** which verifies all of the main components of the unit are working correctly. This ensures that accurate and reliable tests are performed every time the gun is used.

■ See more details at www.haefely-onyx.com

APPLICATIONS

Full compliance and pre-compliance testing to a wide variety of Standards:

- ☑ IEC/EN 61000-4-2 Edition 2 (2009)
 - ☑ IEC/EN 61326
 - ☑ IEC/EN 61000-6-1 & -6-2
 - ☑ IEC 61340-3-1
 - ☑ ISO 10605
 - ☑ GMW 3097
 - ☑ Ford AB/AC
 - ☑ ANSI C63.16
 - ☑ PSA B21 7110
 - ☑ ISO 14304
 - ☑ ITU-T K.20
 - ☑ MIL-STD-331/-464/-750/-883/-1512/-1514/-1541/-1542
 - ☑ RTCA/DO-160
 - ☑ JEDEC 22-A114
 - ☑ GR-78-CORE
 - ☑ GR-1089-CORE
- and others

BENEFITS

Flexibility – enables users to meet many different test specifications with maximum cost effectiveness.

Quick and simple – one touch operation and simple on screen menu structure.

Mobility – the most ergonomic 30kV ESD gun on the market without an external base control unit.

Reliable and economical – A Swiss made product, reliability, service and support in a budget-friendly package.

FEATURES

- User defined 'smart key' function
- Touch screen interface
- Ergonomic design
- All-in-one design (no base unit)
- Predefined tests according to Standards
- Define, store and load tests
- User changeable RC networks
- Automatic polarity switching
- Remote control
- Battery or mains operation
- Multilingual

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TECHNICAL SPECIFICATIONS

Air Discharge Voltage	1 .. 16kV or 1 .. 30kV
Cont. Discharge Voltage	1 .. 16kV or 1 .. 30kV
Discharge Repetition	Single/0.1/0.2/0.5/1/2/5/10/20Hz
Discharge Counter	1 .. 9999
Default R/C – Network	150pF / 330Ω
Dimensions W x H x D	290 x 270 x 110mm

Voltage Resolution	100V steps
Discharge Polarity	Positive & Negative
Operating Modes	Single & Continuous
Battery Life	> 16hrs
Power Consumption	17VA
Weight	1.7kg

SCOPE OF SUPPLY

ONYX ESD simulator in carrying case including:
 Test tip air discharge, Test tip contact discharge, 2 rechargeable battery packs, Ground cable, Battery charger unit incl. Mains adaptor set, R/C module 150pF/330Ω acc. IEC 61000-4-2, Quick start guide, Manual on CD, Calibration certificate

ONYX 30 Order code 2499982

ONYX 16 Order code 2499980



OPTIONS AND ACCESSORIES

R/C Modules



Pulse shape forming modules:

2490203	150pF / 330Ω	(IEC 61000-4-2)
2490204	150pF / 2kΩ	(ISO 10605)
2490205	330pF / 2kΩ	(ISO 10605)
2490206	330pF / 330Ω	(ISO 10605)
2490207	100pF / 1.5kΩ	
2490208	150pF / 150 Ω	
2490209	500pF / 500 Ω	
2490210	500pF / 5kΩ	
2490211	50pF..1nF / 50Ω ..5kΩ	(custom)

30kV AD Tip 2490212



For air discharge testing up to 30kV

Accredited Calibration 2499981

Accredited calibration according to ISO/IEC 17025 requirements

Mains Adaptor 2490214

Power supply replaces the rechargeable battery pack for continuous testing

Remote Control 2490216

Fibre optical RS 232 interface for remote control of ESD gun and control software

Verification Set 2499971



For wave shape verification according to IEC/EN 61000-4-2. Including:
 2Ω Target, 4GHz Attenuators, Coax cable, User manual

Fast Rise Time Tip 24902131



Increases the rise time of the ESD voltage pulse for reliability testing

HCP 2496881

Horizontal Coupling Plane 1.6m x 0.8m for indirect application of the ESD. Includes cable with 2 integrated 470kΩ HV-resistors

VCP 2495581

Vertical Coupling Plane 0.5m x 0.5m, for indirect application of the ESD. Includes cable with 2 integrated 470kΩ HV-resistors

Test Table 2496871

Table 160 x 80cm, made of wood without any metallic parts, as required by IEC 61000-4-2

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